Hello! This is my first LaTeX document.

A rectangle has side lengths of $(x + 1)$ and $(x + 3)$. The equation $A(x) = x^2 + 4x + 3$ gives the area of the rectangle.

Let's solve the quadratic equation $ax^2 + bx + c = 0$ using the quadratic formula:

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}.$$

The sum of the first n natural numbers is given by the formula:

$$S_n = \frac{n(n+1)}{2}.$$

The binomial theorem states that for any positive integer n,

$$(a + b)^n = \sum_{k=0}^{n} \binom{n}{k} a^{n-k} b^k.$$